

TCGCGATCTAGAACTAGTGGCACGGCTCCTGCACTCCCCTGCCCCAGGAACCTGCTCAGGAACCTGCCGGTCTCCGGCT  
GGGACGGTGGCTGGATCAGCTCAAGCCTCCAGGGCCCTGAGGCTGAGGGGCTGAGTGCTCATTCAGCCGCCCTCGGGGA  
ACCCGGGCTGGGAGACCCCATGCCTGGGGGTGAGCCTGGAGCCAGGGCAGTGCGGTGAGAGGCTCCGGAGAGAGGGGCTG  
GGCACCACCAGGCTTGGGTGTGTGATGCGCTGCTGGCCCAGGCTACACCCCGACAAGGGACACCGGGGGCCCTGGGAGC  
AGAGAGACCTCAGAGCAGCCTCCTCCTGCCTCCTGTGGACGGCCGGCCCCAGCTGGTGATCCCAGCCAGTCCCAGCTTT  
CAGTTGCTGCCCCCACCAGCAGTCCCTCAGTCCCTCCATG M A P P T A G P L P 10 SEQ ID NO:2  
ATG GCT CCC CCG ACA GCC GGC CCC CTT CCT 30  
↑SEQ ID NO:3→  
G P A L P P E D P G P D P E S R W L F L 30  
GGC CCA GCT CTT CCG CCT GAG GAC CCA GGG CCG GAT CCG GAG AGC AGG TGG CTT TTC TTG 90  
S A N I L P V V E R C M G A M Q E G M Q 50  
AGC GCC AAC ATT CTG CCC GTG GTG GAG CGG TGC ATG GGT GCC ATG CAA GAG GGG ATG CAG 150  
M V K L R G G S K G L V R F Y Y L D E H 70  
ATG GTG AAG CTG CGT GGC GGC TCC AAG GGC CTG GTC CGC TTC TAC TAC CTG GAC GAG CAC 210  
R S C I R W R P S R K N E K A K I S I D 90  
CGC TCC TGC ATC CGC TGG AGG CCC TCA CGC AAG AAC GAG AAG GCC AAG ATC TCC ATC GAC 270  
S I Q E V S E G R Q S E V F Q R Y P D G 110  
TCC ATC CAG GAG GTG AGT GAG GGG CGG CAG TCG GAG GTC TTC CAG CGC TAC CCT GAC GGC 330  
S F D P N C C F S I Y H G S H R E S L D 130  
AGC TTC GAC CCC AAC TGC TGC TTC AGC ATC TAC CAC GGC AGC CAC CGC GAG TCG CTG GAC 390  
L V S T S S E V A R T W V T G L R Y L M 150  
CTG GTC TCC ACC AGC AGC GAG GTG GCG CGC ACC TGG GTC ACT GGC CTG CGC TAC CTC ATG 450  
A G I S D E D S L A R R Q R T R D Q W L 170  
GCC GGC ATC AGC GAC GAG GAC AGC CTG GCT CGC CGC CAG CGC ACC AGG GAC CAG TGG CTG 510  
K Q T F D E A D K N G D G S L S I G E V 190  
AAG CAG ACG TTT GAC GAG GCC GAC AAG AAC GGG GAT GGC AGC CTG AGC ATT GGC GAG GTC 570  
L Q L L H K L N V N L P R Q R V K Q M F 210  
CTG CAG CTG CTG CAC AAG CTC AAC GTG AAC CTG CCC CGG CAG AGG GTG AAG CAG ATG TTC 630  
R E A D T D D H Q G T L G F E E F C A F 230  
AGG GAA GCG GAC ACG GAT GAC CAC CAA GGG ACG CTG GGT TTT GAA GAG TTC TGT GCC TTC 690  
Y K M M S T R R D L Y L L M L T Y S N H 250  
TAC AAG ATG ATG TCC ACC CGC CGG GAC CTC TAC CTG CTC ATG CTG ACC TAC AGC AAC CAC 750  
K D H L D A A S L Q R F L Q V E Q K M A 270  
AAG GAC CAC CTG GAT GCC GCC AGC CTG CAG CGC TTC CTG CAG GTG GAG CAG AAG ATG GCG 810  
G V T L E S C Q D I I E Q F E P C P E N 290  
GGT GTG ACC CTC GAG AGC TGC CAG GAC ATC ATC GAG CAG TTT GAG CCA TGC CCA GAA AAC 870  
K S K G L L G I D G F T N Y T R S P A G 310  
AAG AGT AAG GGG CTG CTG GGC ATT GAT GGC TTC ACC AAC TAC ACC AGG AGC CCT GCT GGT 930  
D I F N P E H H H V H Q D M T Q P L S H 330  
GAC ATC TTC AAC CCT GAG CAC CAC CAT GTG CAC CAG GAC ATG ACG CAG CCG CTG AGC CAC 990  
Y F I T S S H N T Y L V G D Q L M S Q S 350  
TAC TTC ATC ACC TCG TCC CAC AAC ACC TAC CTC GTG GGT GAC CAG CTC ATG TCC CAG TCA 1050  
R V D M Y A W V L Q A G C R C V E V D C 370  
CGG GTG GAC ATG TAT GCT TGG GTC CTG CAG GCT GGC TGC CGC TGC GTG GAG GTG GAC TGC 1110  
W D G P D G E P I V H H G Y T L T S K I 390  
TGG GAT GGG CCC GAC GGG GAG CCC ATT GTG CAC CAT GGC TAC ACT CTG ACT TCC AAG ATC 1170

FIGURE 1a

L	F	K	D	V	I	E	T	I	N	K	Y	A	F	I	K	N	E	Y	P	410
CTC	TTC	AAA	GAC	GTC	ATT	GAA	ACC	ATC	AAC	AAA	TAT	GCC	TTC	ATC	AAG	AAT	GAG	TAC	CCA	1230
V	I	L	S	I	E	N	H	C	S	V	I	Q	Q	K	K	M	A	Q	Y	430
GTG	ATC	CTG	TCC	ATC	GAA	AAC	CAC	TGC	AGT	GTC	ATC	CAG	CAG	AAG	AAA	ATG	GCC	CAG	TAT	1290
L	T	D	I	L	G	D	K	L	D	L	S	S	V	S	S	E	D	A	T	450
CTG	ACT	GAC	ATC	CTT	GGG	GAC	AAG	CTG	GAC	CTG	TCA	TCA	GTG	AGC	AGT	GAA	GAT	GCC	ACC	1350
T	L	P	S	P	Q	M	L	K	G	K	I	L	V	K	G	K	K	L	P	470
ACA	CTC	CCC	TCT	CCA	CAG	ATG	CTC	AAG	GGC	AAG	ATC	CTC	GTG	AAG	GGG	AAG	AAG	CTC	CCA	1410
A	N	I	S	E	D	A	E	E	G	E	V	S	D	E	D	S	A	D	E	490
GCC	AAC	ATC	AGC	GAG	GAT	GCG	GAG	GAA	GGC	GAG	GTG	TCT	GAT	GAG	GAC	AGT	GCT	GAT	GAG	1470
I	D	D	D	C	K	L	L	N	G	D	A	S	T	N	R	K	R	V	E	510
ATT	GAC	GAT	GAC	TGC	AAG	CTC	CTC	AAT	GGG	GAT	GCA	TCC	ACC	AAT	CGA	AAG	CGT	GTA	GAA	1530
N	T	A	K	R	K	L	D	S	L	I	K	E	S	K	I	R	D	C	E	530
AAC	ACT	GCT	AAG	AGG	AAA	CTG	GAT	TCC	CTC	ATC	AAA	GAG	TCG	AAG	ATT	CGG	GAC	TGT	GAG	1590
D	P	N	N	F	S	V	S	T	L	S	P	S	G	K	L	G	R	K	S	550
GAC	CCC	AAC	AAC	TTC	TCC	GTC	TCC	ACA	CTG	TCC	CCA	TCT	GGA	AAG	CTC	GGA	CGC	AAG	AGC	1650
K	A	E	E	D	V	E	S	G	E	D	A	G	A	S	R	R	N	G	R	570
AAG	GCT	GAA	GAG	GAC	GTG	GAG	TCT	GGG	GAG	GAT	GCC	GGG	GCC	AGC	AGA	CGC	AAT	GGC	CGC	1710
L	V	V	G	S	F	S	R	R	K	K	K	G	S	K	L	K	K	A	A	590
CTC	GTC	GTG	GGA	AGC	TTC	TCC	AGG	CGC	AAG	AAG	AAG	GGC	AGC	AAG	CTG	AAG	AAG	GCG	GCC	1770
S	V	E	E	G	D	E	G	Q	D	S	P	G	G	Q	S	R	G	A	T	610
AGC	GTG	GAG	GAG	GGA	GAT	GAG	GGT	CAG	GAC	TCC	CCG	GGA	GGC	CAG	AGC	CGA	GGG	GCG	ACC	1830
R	Q	K	K	T	M	K	L	S	R	A	L	S	D	L	V	K	Y	T	K	630
CGG	CAG	AAG	AAG	ACC	ATG	AAG	CTG	TCC	CGG	GCC	CTC	TCT	GAC	CTG	GTG	AAG	TAC	ACC	AAG	1890
S	V	A	T	H	D	I	E	M	E	A	A	S	S	W	Q	V	S	S	F	650
TCC	GTG	GCC	ACC	CAC	GAC	ATA	GAG	ATG	GAG	GCG	GCG	TCC	AGC	TGG	CAG	GTG	TCG	TCC	TTC	1950
S	E	T	K	A	H	Q	I	L	Q	Q	K	P	A	Q	Y	L	R	F	N	670
AGC	GAG	ACC	AAG	GCC	CAC	CAG	ATT	CTG	CAG	CAG	AAG	CCG	GCG	CAG	TAC	CTA	CGC	TTC	AAC	2010
Q	Q	Q	L	S	R	I	Y	P	S	S	Y	R	V	D	S	S	N	Y	N	690
CAG	CAG	CAG	CTC	TCC	CGC	ATC	TAC	CCC	TCC	TCC	TAC	CGT	GTG	GAC	TCC	AGC	AAC	TAC	AAC	2070
P	Q	P	F	W	N	A	G	C	Q	M	V	A	L	N	Y	Q	S	E	G	710
CCG	CAG	CCC	TTC	TGG	AAC	GCC	GGC	TGC	CAA	ATG	GTT	GCC	CTG	AAC	TAC	CAG	TCA	GAG	GGG	2130
R	M	L	Q	L	N	R	A	K	F	S	A	N	G	G	C	G	Y	V	L	730
CGG	ATG	CTG	CAG	CTG	AAC	CGA	GCC	AAG	TTC	AGC	GCC	AAC	GGT	GGC	TGC	GGC	TAC	GTA	CTC	2190
K	P	G	C	M	C	Q	G	V	F	N	P	N	S	E	D	P	L	P	G	750
AAG	CCT	GGG	TGC	ATG	TGC	CAG	GGC	GTG	TTC	AAC	CCC	AAC	TCG	GAG	GAC	CCC	CTG	CCC	GGG	2250
Q	L	K	K	Q	L	V	L	R	I	I	S	G	Q	Q	L	P	K	P	R	770
CAG	CTC	AAG	AAG	CAG	CTG	GTG	CTC	CGG	ATC	ATC	AGT	GGC	CAG	CAG	CTT	CCC	AAG	CCG	CGC	2310
D	S	M	L	G	D	R	G	E	I	I	D	P	F	V	E	V	E	I	I	790
GAC	TCC	ATG	CTG	GGG	GAC	CGT	GGG	GAG	ATC	ATC	GAC	CCC	TTT	GTG	GAG	GTG	GAG	ATC	ATT	2370
G	L	P	V	D	C	S	R	E	Q	T	R	V	V	D	D	N	G	F	N	810
GGG	CTC	CCT	GTG	GAC	TGC	AGC	AGG	GAG	CAG	ACC	CGC	GTG	GTG	GAC	GAC	AAC	GGG	TTC	AAC	2430
P	T	W	E	E	T	L	V	F	M	V	H	M	P	E	I	A	L	V	R	830
CCC	ACC	TGG	GAG	GAG	ACC	CTG	GTT	TTC	ATG	GTG	CAC	ATG	CCG	GAG	ATC	GCG	CTG	GTC	CGC	2490
F	L	V	W	D	H	D	P	I	G	R	D	F	I	G	Q	R	T	L	A	850
TTC	CTC	GTG	TGG	GAC	CAC	GAT	CCC	ATC	GGG	CGT	GAC	TTC	ATT	GGC	CAG	AGG	ACG	CTG	GCC	2550
F	S	S	M	M	P	G	Y	R	H	V	Y	L	E	G	M	E	E	A	S	870
TTC	AGC	AGC	ATG	ATG	CCA	GGC	TAC	AGA	CAC	GTG	TAC	CTA	GAA	GGG	ATG	GAA	GAG	GCC	TCC	2610

FIGURE 1b

I	F	V	H	V	A	V	S	D	I	S	G	K	V	K	Q	A	L	G	L	890
ATC	TTC	GTG	CAT	GTG	GCT	GTC	AGT	GAC	ATC	AGC	GGT	AAG	GTC	AAG	CAG	GCT	CTG	GGC	CTA	2670
K	G	L	F	L	R	G	P	K	P	G	S	L	D	S	H	A	A	G	R	910
AAA	GGC	CTC	TTC	CTC	CGA	GGC	CCA	AAG	CCC	GGC	TCG	CTG	GAC	AGT	CAT	GCT	GCT	GGG	CGG	2730
P	P	A	R	P	S	V	S	Q	R	I	L	R	R	T	A	S	A	P	T	930
CCC	CCG	GCC	CGG	CCC	TCC	GTT	AGC	CAG	CGG	ATC	CTG	CGG	CGC	ACG	GCC	AGC	GCC	CCG	ACC	2790
K	S	Q	K	P	G	R	R	G	F	P	E	L	V	L	G	T	R	D	T	950
AAG	AGC	CAG	AAG	CCG	GGC	CGC	AGG	GGC	TTC	CCG	GAG	CTG	GTC	CTG	GGT	ACA	CGG	GAC	ACA	2850
G	S	K	G	V	A	D	D	V	V	P	P	G	P	G	P	A	P	E	A	970
GGC	TCC	AAG	GGG	GTG	GCA	GAC	GAT	GTG	GTG	CCC	CCC	GGG	CCC	GGA	CCT	GCT	CCG	GAA	GCC	2910
P	A	Q	E	G	P	G	S	G	S	P	R	G	K	A	P	A	A	V	A	990
CCA	GCC	CAG	GAG	GGG	CCC	GGC	AGC	GGC	AGC	CCC	CGA	GGT	AAG	GCG	CCA	GCT	GCG	GTG	GCA	2970
E	K	S	P	V	R	V	R	P	P	R	V	L	D	G	P	G	P	A	G	1010
GAG	AAG	AGC	CCT	GTG	CGA	GTG	CGG	CCC	CCG	CGT	GTC	CTG	GAC	GGC	CCC	GGG	CCT	GCT	GGG	3030
M	A	A	T	C	M	K	C	V	V	G	S	C	A	G	V	N	T	G	G	1030
ATG	GCC	GCC	ACA	TGC	ATG	AAG	TGT	GTG	GTG	GGA	TCC	TGC	GCC	GGC	GTG	AAC	ACC	GGG	GGC	3090
L	Q	R	E	R	P	P	S	P	G	P	A	S	R	Q	A	A	I	R	Q	1050
CTG	CAG	AGG	GAG	CGG	CCA	CCC	AGC	CCG	GGG	CCT	GCA	AGC	AGG	CAG	GCA	GCC	ATT	CGC	CAG	3150
Q	P	R	A	R	A	D	S	L	G	A	P	C	C	G	L	D	P	H	A	1070
CAG	CCC	CGG	GCC	CGG	GCT	GAC	TCA	CTG	GGG	GCC	CCC	TGC	TGT	GGC	CTG	GAC	CCT	CAC	GCT	3210
I	P	G	R	S	R	E	A	P	K	G	P	G	A	W	R	Q	G	P	G	1090
ATC	CCG	GGG	AGA	AGC	AGA	GAG	GCC	CCC	AAG	GGT	CCT	GGG	GCC	TGG	AGG	CAG	GGT	CCA	GGC	3270
G	S	G	S	M	S	S	D	S	S	S	P	D	S	P	G	I	P	E	R	1110
GGT	AGC	GGC	TCC	ATG	TCC	TCG	GAC	TCC	AGC	AGC	CCA	GAC	AGC	CCG	GGC	ATC	CCC	GAA	AGG	3330
S	P	R	W	P	E	G	A	C	R	Q	P	G	A	L	Q	G	E	M	S	1130
TCC	CCC	CGC	TGG	CCT	GAG	GGT	GCC	TGC	AGG	CAA	CCG	GGG	GCC	CTG	CAG	GGA	GAG	ATG	AGT	3390
A	L	F	A	Q	K	L	E	E	I	R	S	K	S	P	M	F	S	A	G	1150
GCC	TTG	TTT	GCT	CAA	AAG	CTG	GAG	GAG	ATC	AGG	AGT	AAA	TCC	CCC	ATG	TTC	TCC	GCC	GGT	3450
K	P	L	L	P	C	V	V	L	P	H	A	P	G	M	A	G	P	G	S	1170
AAG	CCC	CTC	TTG	CCC	TGC	GTG	GTC	CTC	CCG	CAC	GCC	CCT	GGC	ATG	GCT	GGG	CCT	GGG	TCA	3510
P	A	A	A	S	A	W	T	V	S	P	R	V	L	V	L	V	A	L	Y	1190
CCT	GCT	GCT	GCT	TCT	GCG	TGG	ACG	GTG	TCG	CCT	CGT	GTG	CTC	GTG	CTC	GTG	GCT	CTG	TAT	3570
P	W	H	C	L	R	G	T	L	L	P	W	L	A	C	G	P	*			1208
CCG	TGG	CAC	TGT	CTC	CGT	GGC	ACT	CTG	CTC	CCT	TGG	CTT	GCC	TGT	GGC	CCA	TAG			3624
CCCCAGCCCTCCTGTCTGAGCTTGAGGCCCTGGGACTTGGGTGGAGCTGGTTTGAGGCCCGACAGGCTGGGAAGAACCA																				
GCTGCTCTTGCTGAGGGTCTGGGGCCGGGACTGTGGCCTGACATGCTGGGCCCTCCGGCTGGGCGCTTCCCCAAACTC																				
ACCTCCTGGGCGGCTGGCGACCTGCATGGCCCTGATGCCCTTTCCTGGGACTGGGGGCCATGTACCATCCCATTCCCAC																				
CTCCCTCTAGGGCAGGCTCCAGGGGTCCCTACTGGGAAGTCTGATGTGGGCAGGTAGTGCAGCTGCTGGGCGTCTCCTG																				
CGCCCCCTGGGACGCTGGAGCCTGCTGAGTGCTGCGTGGAGTAGATTCCCTGGGCCCCAGGGCTTCGCTGCTTTGGGCT																				
GAAGCACCCCACTAGAAAGGTGTCTCCTTAGCCTGGAGGGAGGGACATACACGGAGCCCGCCCCACACCACCCTGCCCC																				
TCCAGACCCCTGACCAAGCTTTCCTTTCTGCCCCACCCACGCTTGCCCTCCGTAGTTAGGAAGTGAAGCGGCGAGT																				
GACAGGTAACGGGGCCAGCCCCG																				

FIGURE 1c

Applicant: Meyers, Rachel E. et al.  
Title: 32544, A NOVEL HUMAN PHOSPHOLIPASE C AND  
USES THEREOF

Attorney/Agent: Tracy M. Sioussat  
Docket No.: MP12000-456P1RDV1M

Sheet 4 of 8 Sheets

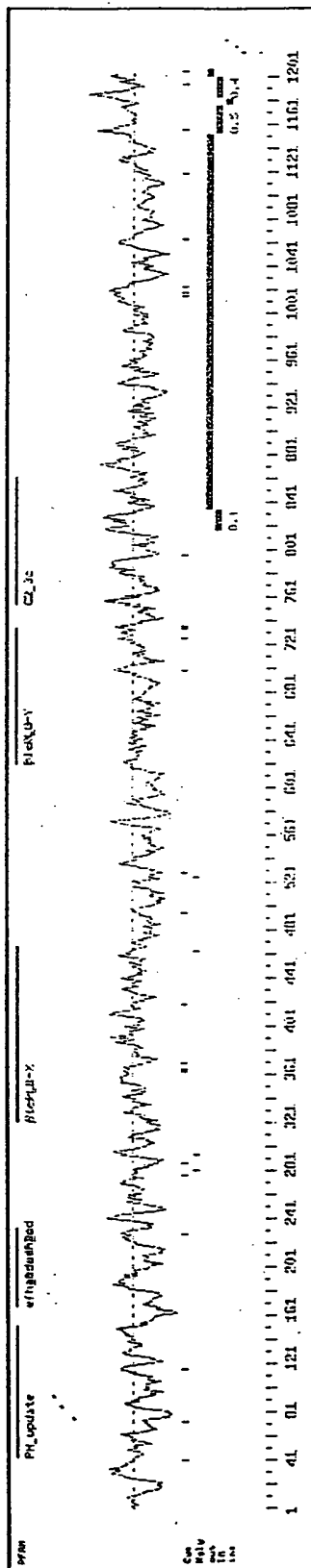


Fig. 2

```

      *->vikeGwLlkks...kswkkRyfvLfn..nvLllykdskkkpkgsipL SEQ ID NO:4
      + eG ++k +++++ R+ L +++++ + ++ k+ k +i++
32544 44 AMQEGMQMVKLrggSKGLVRFYYLDEhrSCIRWRPSR-KNEKAKISI 89

      sgc.qvek.pd.....kncFeirt.dr..tlllqaeseeer
      +++++v ++ ++ ++ +++++ +++++CF i ++++++l l +s+e +
32544 90 DSIqEVSEgRQsevfqrypdsfdpNCCFSIYHgSHreSLDLVSTSSEVA 139

      keWvkaiqsair<-*
      ++Wv+ ++++++
32544 140 RTWVTGLRYLMA 151
  
```

Fig. 3

```

      *->elkeaFkefDkDgDGkIsfeEfkaalkkl<-* SEQ ID NO:5
      lk+ F+e+Dk+gDG +s+ E +++l+kl
32544 169 WLKQTFDEADKNGDGSLSIGEVLQLLHKL 197
  
```

Fig. 4a

```

      *->elkeaFkefDk.DgDGkIsfeEfkaalkkl<-* SEQ ID NO:6
      ++k++F+e+D++D+ G++ feEf+a+ k++
32544 205 RVKQMFREADTdDHQGTLGFEFCAFYKMM 234
  
```

Fig. 4b

```

      *->dmsiPLsHYfisSshntYLTgkQlwGkssvesYrqQLdaGcRcvELD SEQ ID NO:7
      dm +PLsHYfi+SshntYL g+Ql ++s v +Y +L+aGcRcvE D
32544 323 DMTQPLSHYFITSSHNTYLVGDQLMSQSRVDMYAWVLQAGCRCVEVD 369

      cwdGkpddepilyHGhtltleikldVleaIkdfafkPtSpyPvILslen
      cwdG pd+epi+ HG+tl++i++kdV+e+I ++af +yPvILs+en
32544 370 CWDG-PDGEPIVHHGYTLTSKILFKDVIETINKYAFI-KNEYPVILSIEN 417

      HcnsddqQrkmakyfkeiFgdmLltkPtldslttepglpLPslkdrlrgKI
      Hc++ qQ+kma+y+ +i+gd+L + + ++ Lps+ +l+gKI
32544 418 HCSVI-QQKKMAQYLTdILGDKLDLSSVSSEDATT----LPSPQMLKGKI 462

      LLknkk<-*
      L+k+kk
32544 463 LVKGKK 468
  
```

Fig. 5

```

*->ElsnLvnYiqsikFrSfelsGeekntsyeisSFsErkvkakkllkes SEQ ID NO:8
ls+Lv Y +s+ ++ e s ++sSFsE+ ka + l++
32544 621 ALSDLVKYTKSV--ATHDIE-MEAASSWQVSSFSET--KAHQILQQK 662

pvefVkyNkrqLsRvYPkGtRvDSSNfmPqvWnaGCQmVALNfQTsDlp
p + ++N+ qLsR+YP RvDSSN++Pq+fWnaGCQmVALN+Q+ +
32544 663 PAQYLRFNQQQLSRIYPSSYRVDSSNYPNPQPFWNAGCQmVALNYQSEGRM 712

mqiNdGmFeyNggqPdGsfskGYLLKPeflR<-*
+q+N ++F++Ngg +GY+LKP ++
32544 713 LQLNRAKFSANGG-----CGYVLKPGCMC 736

```

Fig. 6

```

*->LtVtvieArnLpkmDk....vngrlsDPYVkvsvllgdckdlkfkfT SEQ ID NO:9
L+ ++i++++Lpk + + ++ ++ ++DP+V+v+++g+++d ++ +T
-- 32544 756 LVLRIISGQQLPKPRDsmIgdRGE-IIDPFVEVEIIGLPVDCSREQT 801-

kvvkktnGLNPvWneEtFvFekvplpelasktLrfaVyDedrfsrDfiG
+vv ++ G+NP+W Et+vF v++pe+a +rf V+D+d ++ DfiG
32544 802 RVVDDN-GFNPTWE-ETLVFM-VHMPEIAL--VRFLVWDHDPiG-RDFiG 845

qvt<-*
q+t
32544 846 QRT 848

```

Fig. 7

```

Query: 883 KVKQALGLKGLFLRGPKPGSLDASHAAGRPPARPSVSQRILRRRTASAPTKSQKPGRRGFPE 942
+VKQALGLKGLFLRGPKPGSLDASHAAGRPPARPSVSQRILRRRTASAPTKSQKPGRRGFPE
Sbjct: 101 QVKQALGLKGLFLRGPKPGSLDASHAAGRPPARPSVSQRILRRRTASAPTKSQKPGRRGFPE 160 SEQ ID NO:10

Query: 943 LVLGTRDTGSKXXXXXXXXXXXXXXXXXXXXXXXXXSGSPRGKAPAAVAEKSPVRVRPPRV 1002
LVLGTRDTGSK SGSPRGKAPAAVAEKSPVRVRPPRV
Sbjct: 161 LVLGTRDTGSKGVADDVVPVPGPGPAPEAPAQEGPGSGSPRGKAPAAVAEKSPVRVRPPRV 220

Query: 1003 LDGPGPAGMAATCMKCVVGSCAGVNTGGLQRRERPPSPGPASXXXXXXXXXXXXXDSLGA 1062
LDGPGPAGMAATCMKCVVGSCAGVNTGGLQRRERPPSPGPAS DSLGA
Sbjct: 221 LDGPGPAGMAATCMKCVVGSCAGVNTGGLQRRERPPSPGPASRQAIRQQPRARADSLGA 280

Query: 1063 CCGLDPHAI PGRSREAPKPGPAWRQXXXXXXXXXXXXXXXXXXXXXIPERSPRWPEGACRQP 1122
CCGLDPHAI PGRSREAPKPGPAWRQ IPERSPRWPEGACRQP
Sbjct: 281 CCGLDPHAI PGRSREAPKPGPAWRQPGPGSGSMSSDSSSPDSPGIPERSPRWPEGACRQP 340

Query: 1123 GALQGEMSALFAQKLEEIRSKSPMFSAGKPLLPCVVLP HXXXXXXXXXXXXXXXXXWTVSPR 1182
GALQGEMSALFAQKLEEIRSKSPMFSAGKPLLPCVVLP WTVSPR
Sbjct: 341 GALQGEMSALFAQKLEEIRSKSPMFSAGKPLLPCVVLP HAPGMAGPGSPAAASAWTVSPR 400

Query: 1183 VLVLVALYPWHCLRGTLPLWLACGP 1207
VLVLVALYPWHCLRGTLPLWLACGP
Sbjct: 401 VLVLVALYPWHCLRGTLPLWLACGP 425

```

Fig. 8

Applicant: Meyers, Rachel E. et al.  
Title: 32544, A NOVEL HUMAN PHOSPHOLIPASE C AND  
USES THEREOF  
Attorney/Agent: Tracy M. Sioussat  
Docket No.: MPI2000-456P1RDV1M  
Sheet 7 of 8 Sheets

Query: 307 SPAGDIFNPEHHVHQDMTQPLSHYFITSSHNTYLVDGQLMS-QSRVDMYAWVLQAGCRC 365  
SP ++F+PEH VHQM QPLSHYFI SSHNTYL G+QL S +S V+MY L GCRC  
Sbjct: 2 SPDCNVFDPEHKQVHQDMNQPLSHYFINSSHNTYLTGNQLSSGESSVEMYRQALLKGRC 61 SEQ ID NO:11

Query: 366 VEVDWCWDGPDG--EPIVHHGYTLTSKILFKDVIETINKYAFIKNEYPVILSIENHCSVI- 422  
+E+DCWDG DG EPI+ HG+T+T++I FKD +E I ++AF+ +EYPVILS+ENHC  
Sbjct: 62 IELDCWDGKGDPEPIITHGHTMTTEISFKDCLEAIKEHAFVTSEYPVILSLENHCDSTP 121

Query: 423 -QQKMAQYLTDLGDKL---DLSSVSSEDATTLPSPQ 456  
QQ KMA+Y ++ GD L L E LPSP+  
Sbjct: 122 QQAKMAEYCKEVFGDMLFTEPLEESPLEPGKELPSPE 159

Fig. 9a

Query: 514 KRKLDLIKESKIRDCEDPNNFSVSTLSPSGKLGRKSKAEEDVESGEDA 562  
KRK+ LIK K+++ + S K ++++EE+ E G DA  
Sbjct: 162 KRKI--LIKNNKKLKEHSEEKE-----SEEKKTDEETESEEEEDEMGSDA 202 SEQ ID NO:12

Fig. 9b

Query: 742 PNSEDPLPGQLKKQLVLR 759  
P E P P +LK+++++  
Sbjct: 151 PGKELPSPEELKRKILIK 168 SEQ ID NO:13

Fig. 9c

Query: 41 CMGAMQEGMQMVKLRGSGKGLVRFYYLDEHRSCIRWRP---SRKN-EKAKISIDSIQEV 96  
C+ MQ+G ++ K+R S R++ LD+ + W P S+K+ EK K I I+E+  
Sbjct: 14 CLQFMQKGSSELKKVRSNSWKYNRYFTLDDDMQTLWEPHWFSKKDSEKPKFDISDIKEIR 73 SEQ ID NO:14

Query: 97 EGRQSEVFQRYPDGSF---DP-NCCFSIYHGSH--RESLDLVSTSSEVARTWVTGLRYLM 150  
G+ +E F R F +P +CCFSI G + ESLLDV+ S++VA WV+GLRYL+  
Sbjct: 74 MGKNTETF-RNNGKEFQIQEPEDCCFSIIFGENYFHESLDLVANSADVANIWVSGRLRYLV 132

Query: 151 AGISDEDSLARRQRTRDQWLKQTFDEADKNGDGSLSIGEVLLHKLNVNLPRQRVKQMF 210  
+ L Q DQWL++ F +AD+N D +S E LL +NV + + +F  
Sbjct: 133 DYA--KHMLDNYQEQLDQWLREWFOQADRNKDSRMSFREANLLKLMNVQMDEEYAFSIF 190

Query: 211 READ 214  
RE D  
Sbjct: 191 RECD 194

Fig. 10

Query: 174 FDEADKNGDGSLSIGEVQLLLHKLNVNLPQRVKQMFREAD--TDDHQGT-LGFEEFCAF 230  
FDE D +G+G L + + LN L ++ F+E + + + T + E F  
Sbjct: 2 FDEFDTDGNGHLDEQTAFKCIKHLNPRLKHHKITNKFKETIKSKEKERTKITKEHFVDL 61 SEQ ID NO:15

Query: 231 YKMMSTRDLYLLMLTYSNKHDLDAASLQRFQVEQKMAGVTLESCQDIIEQFEPEN 290  
YK + TR ++Y LM+ YS +KD+LD L FL+ EQ M VT ++C DIIEQ+EPC E  
Sbjct: 62 YKELGTRPEVYFLMVQYSKNKDYLDCQDLMLFLETEQGMVHVTEDNCLDIIEQYEPCEG 121

Query: 291 KSKGLLGIDGFTNY 304  
+ G + IDGFT+Y  
Sbjct: 122 RENGWMTIDGFTSY 135

**Fig. 11**

Query: 851 FSSMMPGYRHVYLEGMEEASIFVHVAVSDISGKVKQALGLKGLFLRGPKPGSLDASHAAGR 910  
FSS++PGYRHVYLEG+ EASIFVH+ +++I GK +Q GLKGLF + P+ S ++++  
Sbjct: 2 FSSLVPGYRHVYLEGLTEASIFVHITINEIYGKNRQLQGLKGLFNKNPRHSSSENNS--H 59 SEQ ID NO:16

Query: 911 PPARPSVSQRILRRTASAPTKSQKPGRRGFPELV 944  
+ S+ RILRRTASAP K +K + GF E+V  
Sbjct: 60 YVRKRSIGDRILRRTASAPAKGRKKSKMGFQEMV 93

**Fig. 12**